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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,700	02/23/2004	Tsuneki Takahashi	1990.69815	1323
7590 09/09/2009 Patrick G. Burns, Esq. GREER, BURNS & CRAIN, LTD. Suite 2500 300 South Wacker Dr. Chicago, IL 60606				
			EXAMINER PARTHASARATHY, PRAMILA	
			ART UNIT 2436	PAPER NUMBER
			MAIL DATE 09/09/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/784,700

Applicant(s)

TAKAHASHI, TSUNEKI

Examiner

PRAMILA PARTHASARATHY

Art Unit

2436

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 13-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/06/2009 has been entered.

Response to Arguments

2. Applicant's arguments filed 7/06/2009 have been fully considered but they are not persuasive. Applicant primarily argues that the prior art Sako (Publication Number 2004/0131183) and Montgomery et al. (Patent 7,392,404), even when combined, do not teach "overwriting of the cipher key in which a first key is switched to another cipher key (second cipher key) in response to a command to discarding all of the first encoded data recorded on the disk medium". However, the Applicant agrees that the prior art teaches "substantial erasure of data is disclosed by disabling access to data by deleting the key for decoding the data stored in the memory upon detection of an illegal access to data". In other words, the Applicant agrees that the deletion is a direct result of a command to disabling access to data and to delete the key. Thus the resulting combination does teach the claimed invention.

Examiner, while maintaining Examiner Okoronkwo's prior art rejection and arguments (office action mailed 4/3/09), further supports Examiner's Okoronkwo's rationale, by directing the Applicant's attention to Sako paragraph [0028] for the advantage of using a distinct cipher system (& key) to improve the safety of the contents data and re-encrypting the contents data using different cipher key (second cipher key) or using an encryption system different from the

consents data supplied to the input terminal, paragraph [0032]. Using a different cipher key inherently encompass overwriting the first cipher key. However, to support such an overwriting or replacing of second cipher key, Montgomery teaches "preventing an improper access to private data by erasing the key" (Column 7 lines 12-21) supports the instant invention's claim of "changing the cipher key according to a special command". Please see Examiner's suggestion to amend the claims, below.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, Applicant's arguments do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. Examiner suggests amending the independent claims with the subject matter that is already disclosed in the instant specification, in particular, paragraphs [0009; 0038], "command is independent of OS, so the cipher key is prevented from being accidentally changed during operation"; and subject matter that is disclosed in paragraph [0060], "avoiding encoding/decoding according to the cipher key after changing/installing OS and storing the encoded OS into the magnetic disk medium", to claim the instant invention clearly and completely.

Additionally, upon further consideration, a new ground(s) of rejection is made in view of Kobayashi et al. (Patent 7,051,213). Examiner suggests filing a Terminal Disclaimer to overcome the obviousness-type double patenting rejection.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1 – 4, 6 – 12 and 16 – 18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 21 of Patent 7,015,213.

Although the conflicting claims are not identical, they are not patentably distinct from each other because

- "A magnetic disk apparatus comprising: a cipher key memory unit which stores a cipher key used for encoding and decoding data; a cipher encode unit which encodes data input via an interface from an upper apparatus using the cipher key, the cipher encode unit recording the encoded data onto a magnetic disk medium; a cipher decode unit which decodes the encoded data read out from the magnetic disk medium using the cipher key, the cipher encode unit recording the encoded data onto a magnetic disk medium; a cipher decode unit which decodes

the encoded data read out from the magnetic disk medium using the cipher key stored in said cipher key memory unit, the cipher decode unit outputting the decoded data via the interface to the upper apparatus; and a cipher key change unit which erases said cipher key in said cipher key memory unit, defined as a first cipher key, and overwrites the first cipher key with another cipher key, defined as a second cipher key, which cannot decode the encoded data recorded on the magnetic disk medium; wherein the cipher key change unit overwrites the first cipher key stored in said cipher key memory unit with the second cipher key in response to a command for discarding all of a first encoded data recorded on the magnetic disk medium, and makes decoding the first encoded data impossible, the first encoded data encodes using the first cipher key stored in said cipher key memory unit" (claim 1, instant application) is analogous to or an obvious variation of:

The claims of the patent contain every element of claims 1 – 4, 6 – 12 and 16 – 18 of the instant application and thus anticipate the claims of the instant application. Claims 1 – 4, 6 – 12 and 16 – 18 of the instant application therefore are not patently distinct from the copending application claims and as such are unpatentable for obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claims of the instant application are anticipated by patent claims in that the patent claims contains all the limitations of the instant application. Claims of the instant application

therefore is not patentably distinct from the earlier patent claims and as such are unpatentable for obvious-type double patenting (*In re Goodman (CAFC)* 29 USPQ2d 2010 (12/3/1993).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 – 4, 6 – 12 and 16 – 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claims 1 and 12 recite “wherein the cipher key change unit overwrites the first cipher key stored in said cipher key memory unit with the second cipher key in response to a command for discarding all of a first encoded data recorded on the magnetic disk medium, and makes decoding the first encoded data impossible, the first encoded data encodes using the first cipher key stored in said cipher key memory unit”, however do not show how that overwriting the first cipher key with second cipher key can still encode data using the first cipher key.

Examiner suggests amending the independent claims with the subject matter that is disclosed in the instant specification.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the

references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner (Also, refer to previous office action mailed 4/3/09).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. If applicants are aware of any better prior art than those are cited, they are required to bring the prior art to the attention of the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRAMILA PARTHASARATHY whose telephone number is (571)272-3866. The examiner can normally be reached on 8:00a.m. to 5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pramila Parthasarathy/
Primary Examiner, Art Unit 2436